

Week ending October 25, 2008

Countdown to Pad Abort-1 - 178 days



Launch Abort System Motors

Static Test-1 (ST-1) Assembly Abort Motor ST-1 case was successfully assembled to manifold joint (Photo left).

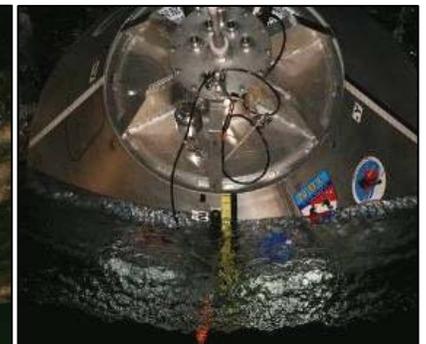
Abort Motor (AM) Manifold/Closure Proof reverse flow nozzle/manifold assembly was successfully pressurized with 4 pressure cycles, to max proof pressure of 1850 psig with water for 50 - 70 seconds. Instrumentation data is being evaluated.

The LAS-1 abort motor manifold and closure hydrostatic proof test was successfully performed at the ATK T18 test facility in Promontory, Utah. The manifold and forward closure assembly was pressurized to 1800 – 1830 psig for 65 seconds. Instrumentation measured within 10% of predictions

Crew Module Testing and Integration

The Crew Module/SepRing Integration Fixture (CSIF) initial proof-load test is complete (Photo at right). The proof load rated the CSIF span beam as a lifting device and certified the CSIF at 25,000 LB capacity.

Tow testing of a ¼ scale Orion crew module took place at Naval Surface Warfare Center, Carderock Division Tow Tank Facilities in West Bethesda, MD. (Photos below). Test results will out briefed in mid-November and a final report will follow in January.



Fabrication of the Ascent Abort-1 crew test module began with the placement of the heat shield simulator, the “keel” of the module. Next the “spider web” backshell stiffeners will be put in place, followed by the installation of the longerons. The photo at right shows the Ascent Abort-1 crew module heat shield simulator on the tall stand at Langley Research Center.



All ValveTech Reaction Control System (RCS) valves have been received at Glenn Research Center. Two ValveTech RCS relief valves (1 flight, 1 flight spare) are in manufacturing. Manufacturing of the development thruster is complete. This thruster will go through an independent inspection process and through the GRC manufacturing inspection process prior to testing. This thruster is capable of mounting directly to the thruster valve and will be the only thruster used for RCS thrust performance testing; flight thrusters will go through functional testing only.



Kennedy Space Center Operations and Checkout (O&C) Facility abandoned systems demolition is complete. The 18” thick concrete ceiling for the proof pressure cell was poured. The forms were removed to prepare for the installation of the blast door to be completed by October 31. Shown at left is the new floor in O&C low bay.